CLAIMS

What is claimed is:

1. A method for changing the speed of an encoded audio signal, said method comprising:

receiving the encoded audio signal;

retrieving frames from the encoded audio signal;

transforming the frames of the audio signal into a frequency domain, wherein each of said frames are associated with a plurality of initial phases, and a corresponding plurality of ending phases; and

replacing the initial phases of at least one of the frames with the ending phases of another frame.

2. The method of claim 1, wherein retrieving frames further comprises:

repeating some of the frames, wherein a desired playback speed is slower than a speed associated with the encoded audio signal; and

skipping some of the frames, wherein a desired playback speed is faster than the speed associated with the encoded audio signal.

3. The method according to claim 1 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the method further comprising frequency-domain decoding of the encoded original audio signal.

4. The method according to claim 3 wherein said decoding comprises:

decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes;

applying an inverse transform to the encoded audio signal; and

applying an inverse window function.

5. The method according to claim 1 wherein the desired playback speed is a programmable value.

6. A machine-readable storage having stored thereon, a computer program having at least one code section that changes the speed of an encoded audio signal, the at least one code section being executable by a machine for causing the machine to perform operations comprising:

receiving the encoded audio signal;

retrieving frames from the encoded audio signal;

transforming the frames of the audio signal into a frequency domain, wherein each of said frames are associated with a plurality of initial phases, and a corresponding plurality of ending phases; and

replacing the initial phases of at least one of the frames with the ending phases of another frame.

7. The machine-readable storage according to claim 6, wherein retrieving frames further comprises:

repeating some of the frames, wherein a desired playback speed is slower than a speed associated with the encoded audio signal; and

skipping some of the frames, wherein a desired playback speed is faster than the speed associated with the encoded audio signal.

8. The machine-readable storage according to claim 6 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the machine-readable storage further comprising code for frequency-domain decoding of the encoded original audio signal.

24

9.   The machine-readable storage according to claim 7 further comprising:

code for decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes;

code for applying an inverse transform to the encoded audio signal; and

code for applying an inverse window function.

10.   The machine-readable storage according to claim 6 wherein the desired playback speed is a programmable value.

11. A system that changes the speed of an encoded audio signal, the system comprising:

a first circuit for receiving the encoded audio signal;

a second circuit for retrieving frames from the encoded audio signal;

a third circuit for transforming the frames of the audio signal into a frequency domain, wherein each of said frames are associated with a plurality of initial phases, and a corresponding plurality of ending phases; and

a fourth circuit for replacing the initial phases of at least one of the frames with the ending phases of another frame.

12. The system according to claim 11 wherein the encoded audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the system further comprising a fifth circuit for frequency-domain decoding of the encoded original audio signal.

13. The system according to claim 11 wherein the desired playback speed is a programmable value.